

# Cordova 项目依赖软件安装

## macOS10.13

需求:在 macOS 下开发 Cordova/ionic+Cordova 项目,从 mac 新机器到项目上线、开发小白或不懂开发的人员都能根据本教程配置项目(即从 0 到 1)。

### 安装列表:

Xcode:Apple 开发者官方 IDE.(ios 必备)

Android SDK:android 开发必备.(Android 必备)

Homebrew:macOS 下包管理工具.(非必须)

nvm:node 管理工具.(非必须)

npm:nodejs 包管理工具, 管理 node 的所有第三方插件,与 nodejs 同生共死  
不离不弃缺一不可.(必须)

node: Node.js 是一个基于 Chrome V8 引擎的 JavaScript 运行环境。Node.js 使用了一个事件驱动、非阻塞式 I/O 的模型,使其轻量又高效。  
安装 node 后就自带了对应的 npm, 并且一个版本的 node 就会自动安装一个对应的 npm.(必须)

Cordova:混合开发的一个工具.(必须)

ionic3/ionic2:也是混合开发的工具,一般配合 Cordova 使用.(必须)

Visual Studio Code/sublime text:JS 编辑器或 IDE 至少要有有一个吧.(必须)

Javascript 开发路线: Angular+ionic+Cordova、VUE+Cordova 等,看项目需求.

其它:待补充,混合开发/跨平台,VUE、Angular 等未安装.

一般情况下, 使用 brew 安装/卸载软件, 但由于有些程序镜像是在国外服务器, 所以安装软件时, 需要翻墙(违法的事情不要做哦), 也可安装 npm、nvm、node 但容易出现莫名其妙的 bug, 并且安装的包是最新版本, 需要额外其它配置 ;  
npm/nvm 用来管理 node.

**无论使用 ionic+Cordova 还是仅仅使用 Cordova, 都会使用到 nodejs, 完整的安装流程应该是:**

如果使用安装包安装, 只需下载 nodejs 即可官网:

<https://nodejs.org/en/download/>

如果使用其它方式安装, 则推荐流程为:

安装 macOS 包管理工具 homebrew(可省略安装 homebrew) ;

使用 homebrew 安装 npm/nvm 包 ;

使用 npm/nvm 安装 node.

在 ionic 项目中, 如果使用安装包安装, 则没必要安装 Homebrew ; nvm 在 node 版本一致时, 也没必要安装 ; npm 管理 js 社区, 必须安装 ; node 必须安装。

软件安装:

前提: mac 联网

**Xcode 安装:**新机器是没有 Xcode IDE 的, 但绝对会有 App Store 和 iTunes Store。

App Store 安装

第一步



第二步



第三步, 找到 xcode, 并点击



Xcode  
Apple

第四步, 点击安装或更新,等待安装即可 (若提示 apple id 登录, 就登录)



更新

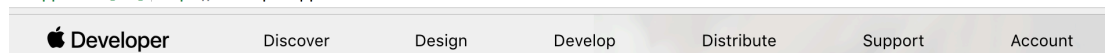


下载安装包安装(dmg 或 pkg)

简书地址: <https://www.jianshu.com/u/8a02ff4459eb>

第一步:浏览器中输入” <https://developer.apple.com/>”, 然后回车键

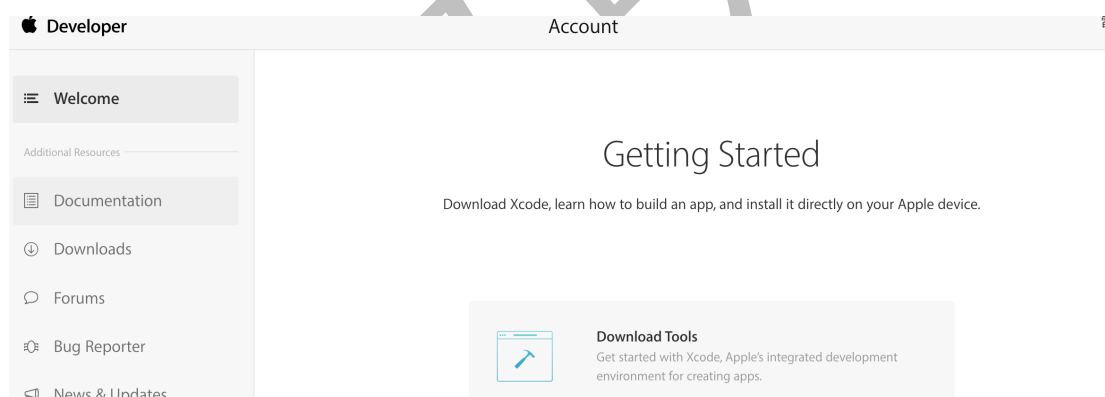
Apple Inc. [US] | <https://developer.apple.com>



第二步:找到” Account” 选项卡,输入 apple id 账号和密码



第三步:下载软件



第四步

## Downloads

Get the latest beta releases of Xcode, macOS, iOS, watchOS, tvOS, and more.

Release Software	Build	Date	
<b>Xcode 9.4</b> <small>Includes macOS, iOS, watchOS, and tvOS SDKs.</small>	<a href="#">Release Notes</a> 9F1027a	May 29, 2018	<a href="#">Download</a>

第五步

下载完成后, 双击 dmg 文件即可安装, 一直点击, 直到完成.

终端命令行安装:Apple 为了安全性, 建议从可信任渠道安装, 如 App Store 或官

网下载，避免第三方重编译病毒等。如果确实想使用终端命令来安装 Xcode(前提是需要先 gcc)，可使用 homebrew 来安装 `brew install xcode` 但安全性无法保证，并且每次 Xcode 更新时，需要在 `Library/Homebrew/os/mac/xcode.rb`

`OS::Mac::Xcode.latest_version`

`OS::Mac::CLT.latest_version`

`OS::Mac::Xcode.detect_version_from_clang_version`

在 `Library/Homebrew/os/mac.rb`

`OS::Mac::STANDARD_COMPILERS`。

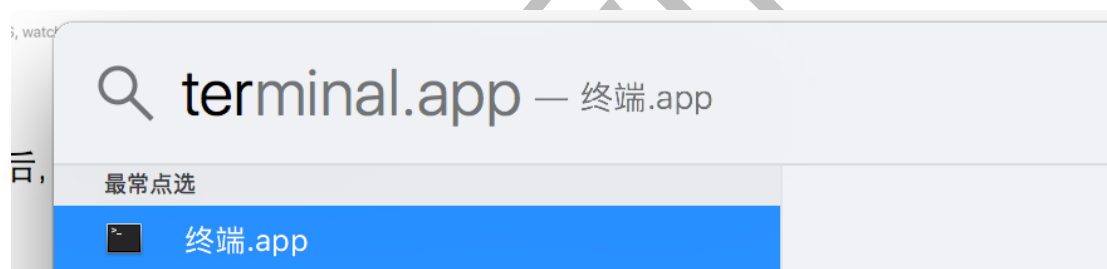
查看是否安装 Xcode：



打开终端，然后在弹出的输入

框输入

“terminal”



然后回车键打开终端，输入 `xcode-select -p`，如果出现

```
[➜ ~] xcode-select -p
/Applications/Xcode.app/Contents/Developer
➜ ~
```

即已安装

Commond Line Tools 安装:

在 <https://developer.apple.com/> 或者

<https://developer.apple.com/download/more/> 登录后，点击“DownLoads”，进入新页面后，往下拖到底，找到

Don't see what you're looking for?

# See more downloads

点击“See more downloads”后,在新的页面下载你的Xcode 和对应的 Command Line Tools, 比如 Xcode 9.4 和 Command Line Tools(macOS 10.13) for Xcode 9.4, 版本要一致。不一致, 请重新下载。

终端命令行安装:xcode-select --install 即可

**Homebrew 官网:** <https://brew.sh/>, 不想使用, 可直接看下一步

安装:将以下命令粘贴至终端:/usr/bin/ruby -e "\$(curl -fsSL <https://raw.githubusercontent.com/Homebrew/install/master/install>)",在输入密码后即可安装成功!

```
[➜] ~ /usr/bin/ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"
==> This script will install:
/usr/local/bin/brew
/usr/local/share/doc/homebrew
/usr/local/share/man/man1/brew.1
/usr/local/share/zsh/site-functions/_brew
/usr/local/etc/bash_completion.d/brew
/usr/local/Homebrew
==> The following new directories will be created:
/usr/local/Cellar
/usr/local/Homebrew
/usr/local/Frameworks
/usr/local/opt
/usr/local/share/zsh
/usr/local/share/zsh/site-functions

Press RETURN to continue or any other key to abort
```

---

**==> Installation successful!**

**==> Homebrew has enabled anonymous aggregate user behaviour analytics.**  
Read the analytics documentation (and how to opt-out) here:  
<https://docs.brew.sh/Analytics.html>

**==> Next steps:**

- Run `brew help` to get started
- Further documentation:

<https://docs.brew.sh>

[➔ ~ brew help

Example usage:

```
brew search [TEXT|/REGEX/]
brew info [FORMULA...]
brew install FORMULA...
brew update
brew upgrade [FORMULA...]
brew uninstall FORMULA...
brew list [FORMULA...]
```

Troubleshooting:

```
brew config
brew doctor
brew install --verbose --debug FORMULA
```

Contributing:

```
brew create [URL [--no-fetch]]
brew edit [FORMULA...]
```

Further help:

```
brew commands
brew help [COMMAND]
man brew
https://docs.brew.sh
```

[➔ ~ brew -v

Homebrew 1.6.6

Homebrew/homebrew-core (git revision 1e98; last commit 2018-06-04)

再安装一个 wget(类似 curl,ruby 语言)

```
[➔ ~ brew install wget
```

Updating Homebrew...

**==> Installing dependencies for wget: gettext, libunistring, libidn2, openssl**

**==> Installing wget dependency: gettext**

**==> Downloading https://homebrew.bintray.com/bottles/gettext-0.19.8.1.high\_sierra.bottle.tar.gz**

卸载:将以下命令粘贴至终端: /usr/bin/ruby -e "\$(curl -fsSL

<https://raw.githubusercontent.com/Homebrew/install/master/uninstall>)", 在输入密码后即可卸载成功!

```
➔ ~ /usr/bin/ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/uninstall)"
Warning: This script will remove:
/Users/xingleizhen/Library/Caches/Homebrew/
/Users/xingleizhen/Library/Logs/Homebrew/
/usr/local/Cellar/
/usr/local/Homebrew/
/usr/local/Homebrew/.github/
/usr/local/Homebrew/.gitignore
/usr/local/Homebrew/.travis.yml
/usr/local/Homebrew/.yardopts
/usr/local/Homebrew/CONTRIBUTING.md
/usr/local/Homebrew/LICENSE.txt
/usr/local/Homebrew/Library/
/usr/local/Homebrew/Library/Homebrew/test/.bundle/
/usr/local/Homebrew/README.md
/usr/local/Homebrew/bin/brew
/usr/local/Homebrew/completions/
/usr/local/Homebrew/docs/
/usr/local/Homebrew/manpages/
/usr/local/bin/brew -> /usr/local/Homebrew/bin/brew
/usr/local/etc/bash_completion.d/brew -> /usr/local/Homebrew/completions/bash/brew
/usr/local/share/doc/homebrew -> /usr/local/Homebrew/docs
/usr/local/share/man/man1/brew-cask.1 -> /usr/local/Homebrew/manpages/brew-cask.1
/usr/local/share/man/man1/brew.1 -> /usr/local/Homebrew/manpages/brew.1
/usr/local/share/zsh/site-functions/_brew -> /usr/local/Homebrew/completions/zsh/_brew
/usr/local/share/zsh/site-functions/_brew_cask -> /usr/local/Homebrew/completions/zsh/_brew_cask
/usr/local/var/homebrew/locks/update
Are you sure you want to uninstall Homebrew? This will remove your installed packages! [y/N] y
==> Removing Homebrew installation...
==> Removing empty directories...
==> /usr/bin/sudo /usr/bin/find /usr/local/Cellar /usr/local/Homebrew /usr/local/Frameworks /usr/local/bin /usr/local/etc /usr/local/include /usr/local/lib /usr/local/opt /usr/local/sbin /usr/local/share /usr/local/var -name .DS_Store -delete
Password:
==> /usr/bin/sudo /usr/bin/find /usr/local/Cellar /usr/local/Homebrew /usr/local/Frameworks /usr/local/bin /usr/local/etc /usr/local/include /usr/local/lib /usr/local/opt /usr/local/sbin /usr/local/share /usr/local/var -depth -type d -empty -exec rmdir {} ;
==> Homebrew uninstalled!
The following possible Homebrew files were not deleted:
/usr/local/bin/
/usr/local/.com.apple.installer.keep
/usr/local/libexec/
/usr/local/include/
/usr/local/sbin/
/usr/local/remotedesktop/
/usr/local/etc/
/usr/local/var/
/usr/local/Watchdata/
/usr/local/lib/
/usr/local/share/
You may wish to remove them yourself.
➔ ~ brew -v
zsh: command not found: brew
```

**nvm 安装** <https://github.com/creationix/nvm>(不想使用, 可跳过这一步)

如果要使用 nvm 来管理 node, 需要先安装 nvm 即先卸载/删除 node&npm ;

终端安装:

输入 curl -o-

<https://raw.githubusercontent.com/creationix/nvm/v0.33.11/install.sh> | bash 或

wget -qO- <https://raw.githubusercontent.com/creationix/nvm/v0.33.11/install.sh>

| bash

```
➔ ~ curl -o- https://raw.githubusercontent.com/creationix/nvm/v0.33.11/install.sh | bash
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           Dload  Upload   Total   Spent    Left   Speed
100 12819  100 12819    0     0  2175      0  0:00:05  0:00:05 --:--:-- 2900
=> Downloading nvm from git to '/Users/xingleizhen/.nvm'
=> Cloning into '/Users/xingleizhen/.nvm'...
remote: Counting objects: 267, done.
remote: Compressing objects: 100% (242/242), done.
remote: Total 267 (delta 31), reused 86 (delta 15), pack-reused 0
Receiving objects: 100% (267/267), 119.46 KiB | 178.00 KiB/s, done.
Resolving deltas: 100% (31/31), done.
=> Compressing and cleaning up git repository

=> Appending nvm source string to /Users/xingleizhen/.bashrc
=> Appending bash_completion source string to /Users/xingleizhen/.bashrc
=> Close and reopen your terminal to start using nvm or run the following to use it now:

export NVM_DIR="$HOME/.nvm"
[ -s "$NVM_DIR/nvm.sh" ] && \. "$NVM_DIR/nvm.sh" # This loads nvm
[ -s "$NVM_DIR/bash_completion" ] && \. "$NVM_DIR/bash_completion" # This loads nvm bash_completion
```

紧接着, 输入 export NVM\_DIR="\$HOME/.nvm"



[ -s "\$NVM\_DIR/nvm.sh" ] && \. "\$NVM\_DIR/nvm.sh" # This loads nvm, 完成以后, 输入 nvm

```
➔ ~ export NVM_DIR="$HOME/.nvm"
[[ -s "$NVM_DIR/nvm.sh" ] && \. "$NVM_DIR/nvm.sh" # This loads nvm
➔ ~ nvm
```

Node Version Manager

Note: <version> refers to any version-like string nvm understands. This include:

安装成功.最后安装你想要的 nodejs

```
nvm install 8.0.0
nvm use 8.0
nvm run 6.10.3 app.js
nvm exec 4.8.3 node app.js
o node 4.8.3
nvm alias default 8.1.0
nvm alias default node
nvm version or shell
```

brew 安装

```
➔ ~ brew search nvm
==> Searching local taps...
convmv mvnvm nvm
==> Searching taps on GitHub...
==> Searching blacklisted, migrated and deleted formulae...
➔ ~ brew install nvm
Updating Homebrew...
```

npm&nodejs 安装

通过下载安装包安装:

浏览器输入: <https://nodejs.org/en/> (官网)或者 <http://nodejs.cn/> (中文网),选择稳定版 LTS 或最新版下载。然后双击下载的文件即安装 npm 和




node-v10.1.0.pkg

nodejs



通过下载 macOS 压缩包安装:



Windows Installer  
node-v8.11.2-x86.msi



macOS Installer  
node-v8.11.2.pkg



Source Code  
下载不区分平台的源代码  
node-v8.11.2.tar.gz

下载:

在浏览器下载或者在终端输入 `curl -O`

`https://nodejs.org/dist/v8.11.2/node-v8.11.2-darwin-x64.tar.gz` 或者 `wget`

`https://nodejs.org/dist/v8.11.2/node-v8.11.2-darwin-x64.tar.gz`, 然后解压该文件,

命令行形式为 `tar -xf node-v8.11.2-darwin-x64.tar.gz`, 在解压缩的文件下查看版本 `./node -v`

```
[➔ Downloads cd node-v8.11.2-darwin-x64/bin
```

```
[➔ bin ./node -v
```

```
v8.11.2
```

下载完文件后, 直接在终端输入以下命令 `sudo tar -C /usr/local`

`--strip-components 1 -xzf node-v8.11.2-darwin-x64.tar.gz`, 即可安装该文件

```
[➔ Downloads] sudo tar -C /usr/local --strip-components 1 -xzf node-v8.11.2-darwin-x64.tar.gz
[Password:]
[➔ Downloads] ls -l /usr/local/bin/node
-rwxr-xr-x  1 502  staff  35393920  5 16 03:07 /usr/local/bin/node
[➔ Downloads] ls -l /usr/local/bin/npm
lrwxr-xr-x  1 502  staff   38  5 16 03:07 /usr/local/bin/npm -> ../lib/node_modules/npm/bin/npm-cli.js
[➔ Downloads] npm -v
5.6.0
[➔ Downloads] node -v
v8.11.2
```

## 通过 brew 安装

在安装了 Homebrew 后, 在终端中输入 `brew install node`(安装)/`brew upgrade node`(升级), 安装或升级。

```
[➔ bin] brew search node
==> Searching local taps...
leafnode      llnode      node-build  node@6      nodebrew
libbitcoin-node node        node@4      node@8      nodeenv
==> Searching taps on GitHub...
homebrew/cask/node-profiler
==> Searching blacklisted, migrated and deleted formulae...
[➔ bin] brew install node
Updating Homebrew...
==> Downloading https://homebrew.bintray.com/bottles/node-10.3.0.high_sierra.bottle.tar.gz
Already downloaded: /Users/xingleizhen/Library/Caches/Homebrew/node-10.3.0.high_sierra.bottle.tar.gz
==> Pouring node-10.3.0.high_sierra.bottle.tar.gz
==> Caveats
Bash completion has been installed to:
  /usr/local/etc/bash_completion.d
==> Summary
📦 /usr/local/Cellar/node/10.3.0: 6,793 files, 59.3MB
[➔ bin] node -v
v10.3.0
[➔ bin] npm -v
6.1.0
```

## 完全卸载 node

通过 brew 安装的, 终端输入 `brew uninstall node`;

通过 node 官网 pkg 安装包的, `sudo rm -rf`

`/usr/local/{bin/{node,npm},lib/node_modules/npm,lib/node,share/man/*/node.*}`, 然后在终端中依次输入以下命令

```
sudo rm /usr/local/bin/npm
```

```
sudo rm -rf /usr/local/bin/node
```

```
sudo rm /usr/local/lib/dtrace/node.d
```

```
sudo rm /usr/local/share/man/man1/node.1
```

```
sudo rm /opt/local/bin/node
```

```
sudo rm /opt/local/include/node
```

```
sudo rm -rf /opt/local/lib/node_modules
```

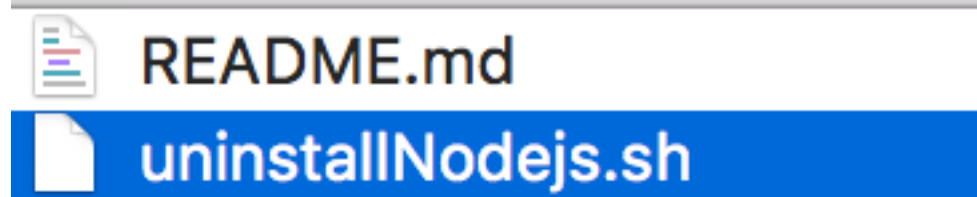
```
sudo rm -rf ~/.npm
```

```
sudo rm -rf ~/.node-gyp
```

```
find ~ -name "node"
```

```
[➔ ~ sudo rm -rf /usr/local/{bin/{node,npm},lib/node_modules/npm,lib/node,share/
man/*/node.*}
zsh: no matches found: /usr/local/share/man/*/node.*
[➔ ~ sudo rm -rf /usr/local/bin/npm
[➔ ~ sudo rm -rf /usr/local/bin/node
[➔ ~ sudo rm -rf /usr/local/bin/_node/
[➔ ~ sudo rm -rf /usr/local/lib/node_modules/
[➔ ~ sudo rm /usr/local/lib/dtrace/node.d
[➔ ~ sudo rm -rf /usr/local/include/node/
[➔ ~ sudo rm -rf /usr/local/share/man/man1/node.1
[➔ ~ sudo rm /opt/local/bin/node
rm: /opt/local/bin/node: No such file or directory
[➔ ~ sudo rm /opt/local/include/node
rm: /opt/local/include/node: No such file or directory
[➔ ~ sudo rm -rf /opt/local/lib/node_modules
[➔ ~ sudo rm -rf ~/.npm
[➔ ~ sudo rm -rf ~/.node-gyp
```

其它方式使用脚本卸载



在终端输入

```
[➔ uninstallNodejs-master cd /Users/xingleizhen/Downloads/uninstallNodejs-master
[➔ uninstallNodejs-master /Users/xingleizhen/Downloads/uninstallNodejs-master/uninstallNodejs.sh
can't open /var/db/receipts/org.nodejs.node.pkg.bom: No such file or directory
**** Can't open /var/db/receipts/org.nodejs.node.pkg.bom.
[➔ uninstallNodejs-master chmod 777 uninstallNodejs.sh
```

**Cordova 安装:**需要先安装 Xcode&npm&node

在终端输入 `sudo npm install -g cordova`.创建项目请在另外一章查看

```
[➔ ~ sudo npm install -g cordova
[Password:
/usr/local/bin/cordova -> /usr/local/lib/node_modules/cordova/bin/cordova
+ cordova@8.0.0
added 416 packages in 32.997s
[➔ ~ cordova -v
8.0.0
```

**ionic 安装:**需要先安装 Xcode&npm&node

终端输入 `sudo npm install -g cordova ionic`/npm install -g ionic 即可. 创建项目请在另外一章查看

## `sudo npm install -g cordova ionic`

Visual Studio Code/sublime text 3:

VS Code 官网下载: <https://code.visualstudio.com/>(免费),双击 dmg 安装即可, 无需额外配置.

Sublime text 3 官网下载: <https://www.sublimetext.com/3>(收费),双击 dmg 安装, 需要下载依赖插件.

## macOS 下 Android 环境搭建

JDK:

Mac 自带 jdk, 可食用 `java -version` 查看版本号

```
➜ ~ java -version
java version "1.8.0_131"
Java(TM) SE Runtime Environment (build 1.8.0_131-b11)
Java HotSpot(TM) 64-Bit Server VM (build 25.131-b11, mixed mode)
➜ ~
```

官方下载:<http://www.oracle.com/technetwork/java/javase/downloads/index.html>

brew 安装:

查询 java

`brew search java`

`brew cask search java`

查看版本信息

`brew cask info java`

安装 `brew cask install java`

IDE:

Android Studio:<http://www.android-studio.org/>

官网下载

至此, 所有软件安装完成!